



Welcome to Chemistry 101



Sign-In at the front of the room: Signing In saves your place in class

Instructor: Larry Taylor, Ph.D. (Background in Blackboard Staff Info)
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Text: None Required; Ball's Intro Chemistry on Course CD

Unit Notes will be text versions of the lecture slide set

Blackboard Folder (Slides_1C) contains the color lecture slides

Blackboard Folder (Slides_2C) contains slides, 2 per page in color

Blackboard Folder (Slides_3C) contains color slides (3 per page) for notes

For a variety of reasons, I have removed all instructor authored material from Blackboard. Since I believe them to be useful, I will provide “my stuff” to registered students. I will distribute the media during the first lab class.

Notes are Outlines: Class is defined by the slide sets

I Don't Take Breaks ... You may take a break whenever needed

Labs always start on time

Late for lab ... instructor may deny you a seat

Being tardy is a safety hazard

Wait Listed Students

Lab protocols limit class to 24 students

Missing first 2 classes → auto “no show” withdrawal

Laptops & Cell Phones

Laptops OK for following slides ... personal computing forfeits right to use in class

Cells ... to minimize class disruption, no cell phones in the lecture room or lab

Anyone texting will be asked to leave

Cell phone use is addictive (modifies brain same as cocaine use)

Cell phone use promotes ADD, insomnia, and learning difficulties

Cell phone radiation considered a cancer risk

Ban on cell phones shows marked increase in class grades

(A+B % went from 71 to 91 when cell phones banned)

Class requires a simple (+, -, x, / and scientific notation) calculator

Advanced and/or graphing calculator not allowed at testing center

Cell phone apps not allowed in lab or testing center

You will need Adobe Acrobat Reader Software

Available as free download from Adobe at <http://www.adobe.com>

May need a flash player for swf videos

Only Printing required: Lab Handouts and Handins
All other printing optional as per student needs

Class Syllabus

Read the syllabus carefully

Note class policies

Lecture Topics

Exam Dates

Grading

If you are registered, you must receive a grade

Better to withdraw, than to take a F

Grading scheme in syllabus and Course Info Document on CD “Blackboard %”

Class Stats (last item in Course Info Folder) updated after every unit exam

Exam dates are inflexible

Students responsible for taking exams during allotted times

Blackboard

Interactive Material

Practice Quizzes

Exams

Dated Items (changes every semester)

Announcements

Syllabus

Test & Lab Schedules

Class Stats

Department Documents

Lab Handouts

Practice Quizzes (IMPORTANT)

These are “gimme’s”

Only highest score retained

Exams based on practice quizzes

Final exam based on exams

Class success is directly related to the practice quizzes!

Blackboard

Primarily, Self-paced, On-line Course

Do problems (from text and Blackboard)

Examine furnished solutions

Clarify any problems with instructor

Before class

After class

Appointment

Email

Learning Resources

Lecture (Slides & Notes on class CD)

Text

Instructor

Classmates

Tutoring – LA 258

Blackboard Practice Quizzes-Single, most important aspect of course!

Begin to Memorize NOW

Names & symbols of common chemical elements

Names, formulas and charges of the polyatomic ions

Common conversion factors

Every Discipline has a language

Symbols & Formulas are
the nouns and verbs of chemistry;
how chemists communicate

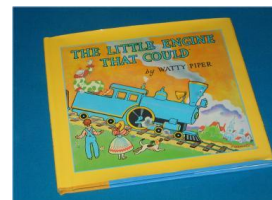
Chemistry is NOT your greatest passion

Chemistry, like any new experience, can:

Intimidate

Overwhelm

Or, just be downright scary



Any complex, overwhelming task, can be broken down to smaller, more digestible blocks

Each lecture

Each lab

Provides a small “baby step”

Towards Success!

Secret to success is never fall behind

Each session builds upon the previous

Learning is best done in small steps, rather than the last night before an exam

My Philosophy:

I “teach” you nothing!

Learning is internal

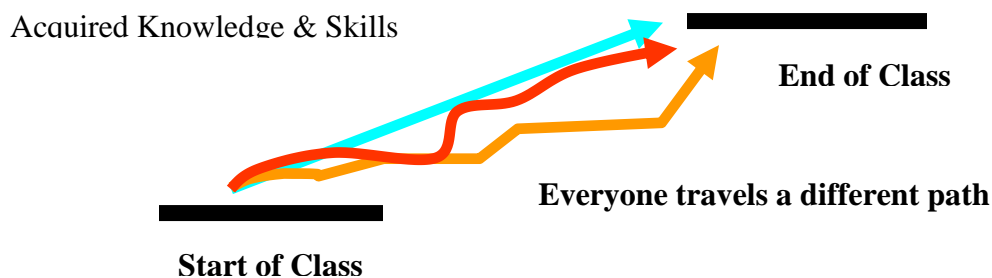
I just act as a guide

You do the work & reap the benefits

**Only you know what you do not understand
Your responsibility to clarify misunderstandings**

The only “stupid question” is the one not asked!

Learning Chemistry is a “Path-Independent “ Process



Asking Questions (Socratic Method) Still Best way to learn

“Eureka Moments”

Learning Chemistry is a series of “Eureka Moments”

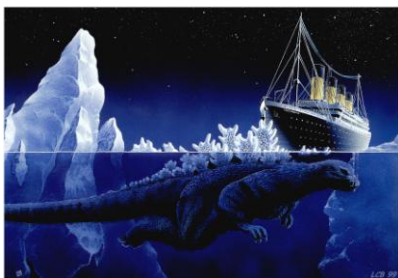
Eureka = Archimedes, “I have found it!”

The Iceberg Theory of Teaching

Like an iceberg, most knowledge/skill lies hidden from view:

Instructors can only teach a portion of what they know

Students are only tested on a portion of what they learn



The more you understand, the better your exam (and life) success

Knowledge of chemistry affects daily life

Mechanics – “classic coke” removes stains on concrete floor

First Aiders – dilute ammonia relieves ant stings

Cooking – kitchen chemistry

Cleaners/polishers = household chemistry

MacGyver = all the chemistry is real

Breaking Bad – Realistic Science

CSI = very good science

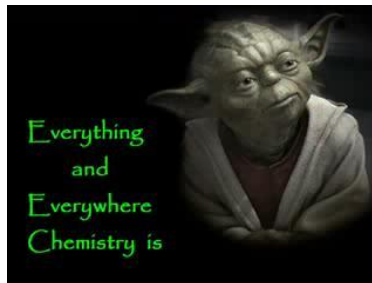
Lack of understanding chemistry has affected world history

Napoleon's Buttons by Penny Le Couteur & Jay Burreson

The Ancients believed

If you know “the secret name” of a thing,, then you have “power” over that object.

Knowledge of chemistry will improve
Career path
Quality of life
Long after this semester is over



Assignments:

Read the syllabus

Start memorizing conversion factors, polyatomic ions, and elements
(Flashcard templates on these topics are on the instructor owned media)

Become familiar with Class CD

Since the drives were paid for (and belong to) the instructor, returning them at the end of the class is expected.